

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/519,336
Source: PCF
Date Processed by STIC: 1/26/06

ENTERED



PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/519,336

DATE: 01/26/2006
TIME: 09:07:01

Input Set : F:\G-194US04PCT-Subst-Seq-List.txt
Output Set: N:\CRF4\01262006\J519336.raw

3 <110> APPLICANT: Daniel Cohen,
4 Ilya Chumakov,
5 Marta Blumenfeld,
6 Sanober Shaikh,
7 Marta Palicio-Barron,
8 Hadi Abderrahim,
9 Pascale Grel
11 <120> TITLE OF INVENTION: USE OF PP2A PHOSPHATASE MODULATORS IN THE TREATMENT OF
MENTAL DISORDERS

13 <130> FILE REFERENCE: G-194US04PCT
15 <140> CURRENT APPLICATION NUMBER: US 10/519,336
16 <141> CURRENT FILING DATE: 2004-12-22
18 <150> PRIOR APPLICATION NUMBER: US 60/391,359
19 <151> PRIOR FILING DATE: 2002-06-25
21 <160> NUMBER OF SEQ ID NOS: 47
23 <170> SOFTWARE: PatentIn version 3.1
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 1932
27 <212> TYPE: DNA
28 <213> ORGANISM: Homo sapiens
30 <220> FEATURE:
31 <221> NAME/KEY: CDS
32 <222> LOCATION: (1)..(1932)
34 <400> SEQUENCE: 1

P.6

35	atg gtg cag aag tcg cgc aac ggc ggc gta tac ccc ggc ccg agc ggg	48
36	Met Val Gln Lys Ser Arg Asn Gly Gly Val Tyr Pro Gly Pro Ser Gly	
37	1 5 10 15	
39	gag aag aag ctg aag gtc ggc ttc gtc ggg ctg gac ccc ggc gcg ccc	96
40	Glu Lys Lys Leu Lys Val Gly Phe Val Gly Leu Asp Pro Gly Ala Pro	
41	20 25 30	
43	gac tcc acc cgg gac ggg gcg ctg ctg atc gcc ggc tcc gag gcc ccc	144
44	Asp Ser Thr Arg Asp Gly Ala Leu Ile Ala Gly Ser Glu Ala Pro	
45	35 40 45	
47	aag cgc ggc agc atc ctc agc aaa cct cgc gcg ggc ggc ggc ggc	192
48	Lys Arg Gly Ser Ile Leu Ser Lys Pro Arg Ala Gly Gly Ala Gly Ala	
49	50 55 60	
51	ggg aag ccc ccc aag cgc aac gcc ttc tac cgc aag ctg cag aat ttc	240
52	Gly Lys Pro Pro Lys Arg Asn Ala Phe Tyr Arg Lys Leu Gln Asn Phe	
53	65 70 75 80	
55	ctc tac aac gtg ctg gag cgg ccg cgc ggc tgg gcg ttc atc tac cac	288
56	Leu Tyr Asn Val Leu Glu Arg Pro Arg Gly Trp Ala Phe Ile Tyr His	
57	85 90 95	
59	gcc tac gtg ttc ctc ctg gtt ttc tcc tgc ctc gtg ctg tct gtg ttt	336
60	Ala Tyr Val Phe Leu Leu Val Phe Ser Cys Leu Val Leu Ser Val Phe	

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61	100	105	110	
63	tcc acc atc aag gag tat gag aag agc tcg gag ggg gcc ctc tac atc			384
64	Ser Thr Ile Lys Glu Tyr Glu Lys Ser Ser Glu Gly Ala Leu Tyr Ile			
65	115	120	125	
67	ctg gaa atc gtg act atc gtg gtg ttt ggc gtg gag tac ttc gtg cgg			432
68	Leu Glu Ile Val Thr Ile Val Val Phe Gly Val Glu Tyr Phe Val Arg			
69	130	135	140	
71	atc tgg gcc gca ggc tgc tgc cgg tac cgt ggc tgg agg ggg cgg			480
72	Ile Trp Ala Ala Gly Cys Cys Arg Tyr Arg Gly Trp Arg Gly Arg			
73	145	150	155	160
75	ctc aag ttt gcc cgg aaa ccg ttc tgt gtg att gac atc atg gtg ctc			528
76	Leu Lys Phe Ala Arg Lys Pro Phe Cys Val Ile Asp Ile Met Val Leu			
77	165	170	175	
79	atc gcc tcc att gcg gtg ctg gcc ggc tcc cag ggc aac gtc ttt			576
80	Ile Ala Ser Ile Ala Val Leu Ala Gly Ser Gln Gly Asn Val Phe			
81	180	185	190	
83	gcc aca tct gcg ctc cgg agc ctg cgc ttc ctg cag att ctg cgg atg			624
84	Ala Thr Ser Ala Leu Arg Ser Leu Arg Phe Leu Gln Ile Leu Arg Met			
85	195	200	205	
87	atc cgc atg gac cgg cgg gga ggc acc tgg aag ctg ctg ggc tct gtg			672
88	Ile Arg Met Asp Arg Arg Gly Gly Thr Trp Lys Leu Leu Gly Ser Val			
89	210	215	220	
91	gtc tat gcc cac agc aag gag ctg gtc act gcc tgg tac atc ggc ttc			720
92	Val Tyr Ala His Ser Lys Glu Leu Val Thr Ala Trp Tyr Ile Gly Phe			
93	225	230	235	240
95	ctt tgt ctc atc ctg gcc tcg ttc ctg gtg tac ttg gca gag aag ggg			768
96	Leu Cys Leu Ile Leu Ala Ser Phe Leu Val Tyr Leu Ala Glu Lys Gly			
97	245	250	255	
99	gag aac gac cac ttt gac acc tac gcg gat gca ctc tgg tgg ggc ctg			816
100	Glu Asn Asp His Phe Asp Thr Tyr Ala Asp Ala Leu Trp Trp Gly Leu			
101	260	265	270	
103	atc acg ctg acc acc att ggc tac ggg gac aag tac ccc cag acc tgg			864
104	Ile Thr Leu Thr Ile Gly Tyr Gly Asp Lys Tyr Pro Gln Thr Trp			
105	275	280	285	
107	aac ggc agg ctc ctt gcg gca acc ttc acc ctc atc ggt gtc tcc ttc			912
108	Asn Gly Arg Leu Leu Ala Ala Thr Phe Thr Leu Ile Gly Val Ser Phe			
109	290	295	300	
111	ttc gcg ctg cct gca ggc atc ttg ggg tct ggg ttt gcc ctg aag gtt			960
112	Phe Ala Leu Pro Ala Gly Ile Leu Gly Ser Gly Phe Ala Leu Lys Val			
113	305	310	315	320
115	cag gag cag cac agg cag aag cac ttt gag aag agg cgg aac ccg gca			1008
116	Gln Glu Gln His Arg Gln Lys His Phe Glu Lys Arg Arg Asn Pro Ala			
117	325	330	335	
119	gca ggc ctg atc cag tcg gcc tgg aga ttc tac gcc acc aac ctc tcg			1056
120	Ala Gly Leu Ile Gln Ser Ala Trp Arg Phe Tyr Ala Thr Asn Leu Ser			
121	340	345	350	
123	cgc aca gac ctg cac tcc acg tgg cag tac tac gag cga acg gtc acc			1104
124	Arg Thr Asp Leu His Ser Thr Trp Gln Tyr Tyr Glu Arg Thr Val Thr			
125	355	360	365	

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127	gtg	ccc	atg	tac	agt	tcg	caa	act	caa	acc	tac	ggg	gcc	tcc	aga	ctt	1152
128	Val	Pro	Met	Tyr	Ser	Ser	Gln	Thr	Gln	Thr	Tyr	Gly	Ala	Ser	Arg	Leu	
129	370				375					380							
131	atc	ccc	ccg	ctg	aac	cag	ctg	gag	ctg	agg	aac	ctc	aag	agt	aaa		1200
132	Ile	Pro	Pro	Leu	Asn	Gln	Leu	Glu	Leu	Leu	Arg	Asn	Leu	Lys	Ser	Lys	
133	385				390					395						400	
135	tct	gga	ctc	gct	ttc	agg	aag	gac	ccc	ccg	ccg	gag	ccg	tct	cca	agt	1248
136	Ser	Gly	Leu	Ala	Phe	Arg	Lys	Asp	Pro	Pro	Pro	Glu	Pro	Ser	Pro	Ser	
137					405				410							415	
139	aaa	ggc	agc	ccg	tgc	aga	ggg	ccc	ctg	tgt	gga	tgc	tgc	ccc	gga	cgc	1296
140	Lys	Gly	Ser	Pro	Cys	Arg	Gly	Pro	Leu	Cys	Gly	Cys	Cys	Pro	Gly	Arg	
141					420				425							430	
143	tct	agc	cag	aag	gtc	agt	ttg	aaa	gat	cgt	gtc	ttc	tcc	agc	ccc	cga	1344
144	Ser	Ser	Gln	Lys	Val	Ser	Leu	Lys	Asp	Arg	Val	Phe	Ser	Ser	Pro	Arg	
145					435				440							445	
147	ggc	gtg	gct	gcc	aag	ggg	aag	ggg	tcc	ccg	cag	gcc	cag	act	gtg	agg	1392
148	Gly	Val	Ala	Ala	Lys	Gly	Lys	Gly	Ser	Pro	Gln	Ala	Gln	Thr	Val	Arg	
149					450				455							460	
151	cgg	tca	ccc	agc	gcc	gac	cag	agc	ctc	gag	gac	agc	ccc	agc	aag	gtg	1440
152	Arg	Ser	Pro	Ser	Ala	Asp	Gln	Ser	Leu	Glu	Asp	Ser	Pro	Ser	Lys	Val	
153	465				470					475						480	
155	ccc	aag	agc	tgg	agc	ttc	ggg	gac	cgc	agc	cg	gca	cg	cag	gct	ttc	1488
156	Pro	Lys	Ser	Trp	Ser	Phe	Gly	Asp	Arg	Ser	Arg	Ala	Arg	Gln	Ala	Phe	
157					485				490							495	
159	cgc	atc	aag	ggt	gcc	gcf	tca	cg	cag	aac	tca	gaa	gaa	gca	agc	ctc	1536
160	Arg	Ile	Lys	Gly	Ala	Ala	Ser	Arg	Gln	Asn	Ser	Glu	Glu	Ala	Ser	Leu	
161					500				505							510	
163	ccc	gga	gag	gac	att	gtg	gat	gac	aag	agc	tgc	ccc	tgc	gag	ttt	gtg	1584
164	Pro	Gly	Glu	Asp	Ile	Val	Asp	Asp	Lys	Ser	Cys	Pro	Cys	Glu	Phe	Val	
165					515				520							525	
167	acc	gag	gac	ctg	acc	ccg	ggc	ctc	aaa	gtc	agc	atc	aga	gcc	gtg	tgt	1632
168	Thr	Glu	Asp	Leu	Thr	Pro	Gly	Leu	Lys	Val	Ser	Ile	Arg	Ala	Val	Cys	
169					530				535							540	
171	gtc	atg	cg	ttc	ctg	gtg	tcc	aag	cg	aag	ttc	aag	gag	agc	ctg	cg	1680
172	Val	Met	Arg	Phe	Leu	Val	Ser	Lys	Arg	Lys	Phe	Lys	Glu	Ser	Leu	Arg	
173	545				550					555						560	
175	ccc	ttc	atc	gac	gtg	atg	gac	gtc	atc	gag	cag	tac	tca	gcc	ggc	cac	1728
176	Pro	Tyr	Asp	Val	Met	Asp	Val	Ile	Glu	Gln	Tyr	Ser	Ala	Gly	His	Leu	
177					565				570							575	
179	gac	atg	ctg	tcc	cga	att	aag	agc	ctg	cag	tcc	agg	caa	gag	ccc	cg	1776
180	Asp	Met	Leu	Ser	Arg	Ile	Lys	Ser	Leu	Gln	Ser	Arg	Gln	Glu	Pro	Arg	
181					580				585							590	
183	ctg	cct	gtc	cag	cag	ggg	aca	aga	acg	ggg	tgg	gct	tct	ggg	aca	aag	1824
184	Leu	Pro	Val	Gln	Gln	Gly	Thr	Arg	Thr	Gly	Trp	Ala	Ser	Gly	Thr	Lys	
185					595				600							605	
187	ccc	act	gtg	gcc	cat	gg	gg	gt	gg	gt	tgg	gg	gg	cct			1872
188	Pro	Thr	Val	Ala	His	Gly	Ser	Ala	Gly	Gly	Val	Trp	Ala	Gly	Pro		
189					610				615							620	
191	cct	ccc	cac	cca	cgt	cgg	cct	ctg	tca	gct	tct	gtt	gt	tct	tca	caa	1920

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192 Pro Pro His Pro Arg Arg Pro Leu Ser Ala Ser Val Val Ser Ser Gln
 193 625 630 635 640
 195 agt ctg ttt taa
 196 Ser Leu Phe
 200 <210> SEQ ID NO: 2
 201 <211> LENGTH: 643
 202 <212> TYPE: PRT
 203 <213> ORGANISM: Homo sapiens
 205 <400> SEQUENCE: 2
 207 Met Val Gln Lys Ser Arg Asn Gly Gly Val Tyr Pro Gly Pro Ser Gly
 208 1 5 10 15
 211 Glu Lys Lys Leu Lys Val Gly Phe Val Gly Leu Asp Pro Gly Ala Pro
 212 20 25 30
 215 Asp Ser Thr Arg Asp Gly Ala Leu Leu Ile Ala Gly Ser Glu Ala Pro
 216 35 40 45
 219 Lys Arg Gly Ser Ile Leu Ser Lys Pro Arg Ala Gly Gly Ala Gly Ala
 220 50 55 60
 223 Gly Lys Pro Pro Lys Arg Asn Ala Phe Tyr Arg Lys Leu Gln Asn Phe
 224 65 70 75 80
 227 Leu Tyr Asn Val Leu Glu Arg Pro Arg Gly Trp Ala Phe Ile Tyr His
 228 85 90 95
 231 Ala Tyr Val Phe Leu Leu Val Phe Ser Cys Leu Val Leu Ser Val Phe
 232 100 105 110
 235 Ser Thr Ile Lys Glu Tyr Glu Lys Ser Ser Glu Gly Ala Leu Tyr Ile
 236 115 120 125
 239 Leu Glu Ile Val Thr Ile Val Val Phe Gly Val Glu Tyr Phe Val Arg
 240 130 135 140
 243 Ile Trp Ala Ala Gly Cys Cys Arg Tyr Arg Gly Trp Arg Gly Arg
 244 145 150 155 160
 247 Leu Lys Phe Ala Arg Lys Pro Phe Cys Val Ile Asp Ile Met Val Leu
 248 165 170 175
 251 Ile Ala Ser Ile Ala Val Leu Ala Ala Gly Ser Gln Gly Asn Val Phe
 252 180 185 190
 255 Ala Thr Ser Ala Leu Arg Ser Leu Arg Phe Leu Gln Ile Leu Arg Met
 256 195 200 205
 259 Ile Arg Met Asp Arg Arg Gly Gly Thr Trp Lys Leu Leu Gly Ser Val
 260 210 215 220
 263 Val Tyr Ala His Ser Lys Glu Leu Val Thr Ala Trp Tyr Ile Gly Phe
 264 225 230 235 240
 267 Leu Cys Leu Ile Leu Ala Ser Phe Leu Val Tyr Leu Ala Glu Lys Gly
 268 245 250 255
 271 Glu Asn Asp His Phe Asp Thr Tyr Ala Asp Ala Leu Trp Trp Gly Leu
 272 260 265 270
 275 Ile Thr Leu Thr Thr Ile Gly Tyr Gly Asp Lys Tyr Pro Gln Thr Trp
 276 275 280 285
 279 Asn Gly Arg Leu Leu Ala Ala Thr Phe Thr Leu Ile Gly Val Ser Phe
 280 290 295 300
 283 Phe Ala Leu Pro Ala Gly Ile Leu Gly Ser Gly Phe Ala Leu Lys Val
 284 305 310 315 320

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287 Gln Glu Gln His Arg Gln Lys His Phe Glu Lys Arg Arg Asn Pro Ala
288 325 330 335
291 Ala Gly Leu Ile Gln Ser Ala Trp Arg Phe Tyr Ala Thr Asn Leu Ser
292 340 345 350
295 Arg Thr Asp Leu His Ser Thr Trp Gln Tyr Tyr Glu Arg Thr Val Thr
296 355 360 365
299 Val Pro Met Tyr Ser Ser Gln Thr Gln Thr Tyr Gly Ala Ser Arg Leu
300 370 375 380
303 Ile Pro Pro Leu Asn Gln Leu Glu Leu Leu Arg Asn Leu Lys Ser Lys
304 385 390 395 400
307 Ser Gly Leu Ala Phe Arg Lys Asp Pro Pro Pro Glu Pro Ser Pro Ser
308 405 410 415
311 Lys Gly Ser Pro Cys Arg Gly Pro Leu Cys Gly Cys Cys Pro Gly Arg
312 420 425 430
315 Ser Ser Gln Lys Val Ser Leu Lys Asp Arg Val Phe Ser Ser Pro Arg
316 435 440 445
319 Gly Val Ala Ala Lys Gly Lys Gly Ser Pro Gln Ala Gln Thr Val Arg
320 450 455 460
323 Arg Ser Pro Ser Ala Asp Gln Ser Leu Glu Asp Ser Pro Ser Lys Val
324 465 470 475 480
327 Pro Lys Ser Trp Ser Phe Gly Asp Arg Ser Arg Ala Arg Gln Ala Phe
328 485 490 495
331 Arg Ile Lys Gly Ala Ala Ser Arg Gln Asn Ser Glu Glu Ala Ser Leu
332 500 505 510
335 Pro Gly Glu Asp Ile Val Asp Asp Lys Ser Cys Pro Cys Glu Phe Val
336 515 520 525
339 Thr Glu Asp Leu Thr Pro Gly Leu Lys Val Ser Ile Arg Ala Val Cys
340 530 535 540
343 Val Met Arg Phe Leu Val Ser Lys Arg Lys Phe Lys Glu Ser Leu Arg
344 545 550 555 560
347 Pro Tyr Asp Val Met Asp Val Ile Glu Gln Tyr Ser Ala Gly His Leu
348 565 570 575
351 Asp Met Leu Ser Arg Ile Lys Ser Leu Gln Ser Arg Gln Glu Pro Arg
352 580 585 590
355 Leu Pro Val Gln Gln Gly Thr Arg Thr Gly Trp Ala Ser Gly Thr Lys
356 595 600 605
359 Pro Thr Val Ala His Gly Gly Ser Ala Gly Gly Val Trp Ala Gly Pro
360 610 615 620
363 Pro Pro His Pro Arg Arg Pro Leu Ser Ala Ser Val Val Ser Ser Gln
364 625 630 635 640
367 Ser Leu Phe
371 <210> SEQ ID NO: 3
372 <211> LENGTH: 1878
373 <212> TYPE: DNA
374 <213> ORGANISM: Homo sapiens
376 <220> FEATURE:
377 <221> NAME/KEY: CDS
378 <222> LOCATION: (1)..(1878)
380 <400> SEQUENCE: 3

RAW SEQUENCE LISTING ERROR SUMMARY
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Input Set : F:\G-194US04PCT-Subst-Seq-List.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:37; N Pos. 10,5363,8080,10296,14528,15336,15457,16288,16306,16307
Seq#:37; N Pos. 16316,16397,56012,57662
Seq#:37; N Pos. 60402,61110,98207,98208,98209,98210,98211,99743,108055
Seq#:37; N Pos. 109094,109125
Seq#:37; N Pos. 118900,119024,119025,119026,119027,119028,119029,119030
Seq#:37; N Pos. 119031,119032,119033,119034,119035,119036,119037,119038
Seq#:37; N Pos. 119039,119040,119041,119042,119043,119044,119045,119046
Seq#:37; N Pos. 119047,119048,119049,119050,119051,119052,119053,119054
Seq#:37; N Pos. 119055,119056,119057,119058,119059,119060,119061,119062
Seq#:37; N Pos. 119063,119064,119065,119066,119067,119068,119069,119070
Seq#:37; N Pos. 119071,119072,119073,119074,119075,119076,119077,119078
Seq#:37; N Pos. 119079,119080,119081,119082,119083,119084,119085,119086
Seq#:37; N Pos. 119087,119088,119089,119090,119091,119092,119093,119094
Seq#:37; N Pos. 119095,119096,119097,119098,119099,119100,119101,119102
Seq#:37; N Pos. 119103,119104,119105,119106,119107,119108,119109,119110
Seq#:37; N Pos. 119111,119112,119115,119116,119117,119118,119119,119120
Seq#:37; N Pos. 119121,119123,141674,142063,142137,142967,143077,143506
Seq#:37; N Pos. 143587,143629,149079

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32
Seq#:33,34,35,36,39,40,41,42,43,44,45,46,47

VERIFICATION SUMMARY
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L:1938 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:2122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:5314
L:2214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:8074
L:2288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:10294
L:2428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:14494
L:2456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:15334
L:2460 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:15454
L:2486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16234
L:2488 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16294
L:2490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16354
L:3810 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:55954
L:3866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:57634
L:3958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:60394
L:3980 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:61054
L:5244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:98202
L:5304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:99719
L:5584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:108053
L:5618 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:109073
L:5944 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:118853
L:5948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:118973
L:5950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:119033
L:5952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:119093
L:6726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:141615
L:6740 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:142035
L:6742 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:142095
L:6770 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:142935
L:6774 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:143055
L:6788 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:143475
L:6790 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:143535
L:6792 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:143595
L:6980 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:149027